



# Department for Business Innovation & Skills

**COUNCIL FOR SCIENCE &  
TECHNOLOGY**

**TRIENNIAL REVIEW**

**JULY 2014**

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# Introduction

This document sets out the findings of the 2013 Triennial Review of the Council for Science and Technology (CST). It describes the purpose of Triennial Reviews, the process adopted for this review and presents findings based on the views from a range of stakeholders. The report draws on this evidence to make recommendations as to the future of the CST.

## Scope and purpose of Triennial Reviews

Triennial Reviews are a Cabinet Office mandated process for reviewing the function of Non-Departmental Public Bodies (NDPBs), the appropriateness of the bodies' delivery mechanisms and their governance arrangements. Reviews should take place every 3 years for each NDPB, unless an exemption is agreed by the Cabinet Office.

The Cabinet Office has identified 2 principal aims for Triennial Reviews :

- to provide a robust challenge to the continuing need for individual NDPBs - both their functions and their form;
- where it is agreed that a body should remain as an NDPB, to review the control and governance arrangements in place to ensure that the public body is complying with recognised principles of good corporate governance.

Triennial Reviews usually have 2 stages, addressing these 2 principal aims.

Stage 1 is designed to examine the key functions of the NDPB. It examines how these contribute to the core business of the NDPB and the sponsor Department, and whether the functions are still needed. Where functions are still needed the review considers alternative delivery options to determine how the functions might best be delivered.

Where the outcome of the first stage of the review is that the NDPB will remain, Stage 2 looks at the control and governance arrangements in place to ensure that the NDPB is operating in line with recognized principles of good corporate governance.

All reviews are to be conducted according to the following principles:

- Proportionate: not overly bureaucratic; appropriate for the size and nature of the NDPB.
- Timely: completed quickly to minimise disruption and reduce uncertainty.
- Challenging: robust and rigorous, evidencing the continuing need for functions and examining and evaluating a wide range of delivery options.
- Inclusive: open and inclusive. Individual NDPBs must be engaged, key users and stakeholders should have the opportunity to contribute. Parliament should be informed about the commencement and conclusions.

- Transparent: all reviews should be announced and reports should be published.
- Value for Money: conducted to ensure value for money for the taxpayer.

The programme of departmental Triennial Reviews is agreed on a rolling basis with the Cabinet Office. The Department for Business, Innovation and Skills (BIS) committed to carry out a review of the CST starting in the first quarter of 2013-14.

The Minister for Universities and Science, David Willetts, announced the Triennial Review of the CST in a Written Ministerial Statement on 15 April 2013. The review team was drawn from a range of BIS Directorates to ensure a measure of objectivity, and consisted of:

- Amanda Brooks, (lead reviewer), Deputy Director, Industrial Strategy
- Robert Canniff, Assistant Director, Pathways to Higher Skills
- Jane Hartshorne, Assistant Director, Consumer and Competition Policy
- Gerry Franks, Senior Policy Adviser, Low Pay Commission

# Conclusions and recommendations

## Conclusion

The function delivered by the CST is still required and it meets all 3 of the tests for NDPB status. It operates in line with the principles of good corporate governance but there are a number of opportunities to improve how the CST functions.

## Recommendations

1. The CST is providing a valuable and valued input and should continue to exist as an advisory NDPB.
2. The terms of reference for the CST should be revised to refer explicitly to its provision of independent advice, and aligned with the role it has been playing.
3. The CST should not increase further in size. However, the introduction of greater business representation has been well received and could be further enhanced.
4. The Government Office for Science should create a systematic approach to allow Ministers, Departmental Chief Scientific Advisers and senior policy officials to propose issues for CST to consider. Whether the CST takes them forward would remain at its discretion as now.
5. The CST should routinely follow up with policy officials and Ministers if necessary on the implementation of their reports.
6. The CST should increase the transparency of its work programme where it can do so without jeopardising its ability to give rapid independent advice, to enable those who may wish to contribute to projects and/or disseminate the findings to do so more effectively. This would enable the CST to harness the willingness of other organisations to act as a multiplier for its work.
7. The CST should consider how more attention could be brought to its reports, bearing in mind its current resourcing levels.

# Stage 1

This section sets out the detailed findings, conclusions and recommendations from Stage 1 of the Triennial Review of the CST and makes formal recommendations on its functions. This is not a review of the policy relating to science and technology.

The CST was established in 1993 in response to the Government White Paper 'Realising our potential: a strategy for science, engineering and technology'. It replaced the Advisory Council on Science and Technology. It is an advisory NDPB to the Prime Minister but, for administrative purposes, it is sponsored by BIS.

## Stage 1 process

In line with Cabinet Office guidance, the first stage of the review identified and examined the key functions of the CST. It assessed how the functions contribute to the Government's business and considered whether the functions are still needed. As the conclusion was that the function is still needed, the review then examined how it might best be delivered.

The review assessed the CST against the Government's '3 tests' for remaining an NDPB and then examined a range of delivery options.

## Our approach to the Review

As set out above, Cabinet Office guidance states that reviews should be appropriate for the size and nature of the NDPB in question and should also offer value for money. Given the small scale of the CST and the very small burden it imposes on public resources, a proportionate, but robust, review was carried out.

Consultation took place through structured interviews either face-to-face or over the telephone with the 2 co-chairs and most existing CST members, as well as with a small number of ex-CST members. Interviews were also held with BIS Ministers and officials who work, or have worked with the CST in BIS and other government departments, including No 10, and who are considered the CST's 'customers'. Other stakeholders/customers, including the Chief Scientific Adviser in each government department, were also invited to provide written views.

The House of Commons Select Committee for Business, Innovation and Skills, the House of Commons Science and Technology Committee, and the House of Lords Science and Technology Committee were also invited to contribute to the review process.

The Review Team also attended 2 CST meetings to answer any questions on the review and its findings.

The Review Team would like to thank all those who gave their time to providing views on the CST. Those who responded, or were invited to respond, are shown at Annex A. In total, the Review Team had interviews with and written inputs from over 40 stakeholders.

The Review Team considered the responses from stakeholders and examined the outputs and achievement of the CST to judge whether the function is still necessary. We also used these responses to inform our recommendation on the preferred method of delivery.

## Current structure and function of the CST

The members of the CST are senior figures drawn from across the fields of science, engineering and technology, from both business and academia. They are appointed by the Prime Minister and in line with guidance from the Commissioner for Public Appointments. They are unremunerated. There are currently nineteen members, including 2 co-chairs - an independent and the Government Chief Scientific Adviser. Since 2010, the Presidents of the national academies have been invited on to the CST in an ex-officio capacity. The current membership is set out at Annex B. The roles and responsibilities of the CST are outlined in a 'Ways of Working' document .

The CST's current terms of reference are:

"To advise the Prime Minister on the strategic policies and framework for:

- Sustaining and developing science, engineering, technology and mathematics (STEM) in the UK, and promoting international co-operation in STEM;
- Fostering the practice and perception of STEM as an integral part of the culture of the UK;
- Promoting excellence in STEM education;
- Making more effective use of research and scientific advice in the development and delivery of policy and public services across Government;
- Promoting STEM-based innovation in business and the public services to promote the sustainable development of the UK economy, the health and quality of life of UK citizens, and global sustainable development.

The Council will work on cross-cutting issues of strategic importance, taking a medium to long term approach. In developing its advice it will take into account the cultural, economic, environmental, ethical and social context of developments in STEM."

The CST holds quarterly meetings in March, June, September and December over a 2-day period. As well as CST members, meetings are attended by guest speakers and observers relevant to the topics being discussed.

The CST's work programme is developed by proposals from its members and requests from the Prime Minister or - occasionally - other Ministers. The CST is under no obligation to agree to these requests if it believes that other work would be of greater value, although in practice this has rarely been the case.

The CST reviews its work programme regularly and decides the approach to each area of work on a case-by-case basis. Much of CST's work is conducted through specialist

subgroups of CST members, with other experts drawn in as appropriate. The reports and papers prepared by the sub-groups are agreed by the Council before being submitted to the Prime Minister. The inclusion of the national academies as ex-officio members has begun to have a multiplier effect in engaging stakeholders in a wider debate on a particular issue. The CST's output is typically a letter to the Prime Minister, subsequently published (but not actively promoted) on the CST's website. Occasionally a longer report has been produced and/or there has been a programme of events to disseminate CST's work.

The CST is supported by a Secretariat funded by and based in the Government Office for Science. The Secretariat's budget in 2012/13 was £180,000. This was broken down as £130,000 for staff costs and £50,000 meeting costs (venue hire, T&S, etc).

## Analysis of CST function

This section considers whether the function of the CST is still necessary and whether an advisory NDPB is the best model for delivery of this function.

The overwhelming view of all those who contributed to the review was that it was imperative that the Prime Minister and government ministers should have access to independent and expert scientific advice on strategic issues facing Government in the short, medium and long term. The CST has been uniquely well placed to fulfil this function, given the breadth of scientific, academic and business expertise that it is able to bring together to produce non-political, independent advice rooted in scientific evidence on key challenges facing the UK.

The CST's independence was repeatedly attributed to its breadth of expertise and that it had no interest to serve other than giving Ministers the best possible evidence based advice. No one consulted offered any examples of bodies that duplicated the CST's work. Nor was any body identified that could undertake this function that did not have its own interests (for example a membership base) to serve.

The review team also considered the practice in a small number of other countries, a synopsis of which is at Annex C. This highlighted that, although the exact structure and remit of advisory science and technology bodies in other countries varied, what was clear was that a body of appropriate experts was necessary to provide impartial, cross-cutting advice.

## Delivery models

The review team then considered alternative delivery models for the CST, set out in turn below.

### Move the functions out of central Government (e.g. to the voluntary or private sector)

Given that the CST membership is drawn from senior members of the academic, business and scientific communities, the only element that could be moved out of central Government is the Secretariat. The cost of providing the Secretariat function is relatively low at approximately £130,000 in 2012/13 (2.1 FTE), plus a £50,000 budget for meeting costs.



The review team considered whether this could be delivered on contract by another organisation. There was consensus from CST members that the Secretariat is highly effective. A high value was placed by CST members on the co-location of the Secretariat with the Government's Chief Scientific Adviser. Advice from the Cabinet Office was that the likely cost of any tendering exercise and monitoring the delivery of the contract would exceed any financial savings that might be made from this delivery model. The review team therefore concluded that this delivery model would not meet value for money requirements and ruled it out.

### **Merge with another body**

Not appropriate. As noted above, no other bodies with appropriate synergies with the CST have been identified.

### **Delivery by a new executive agency**

This is not appropriate because the CST has no executive functions.

### **Bring the functions 'in house'**

The Secretariat for the CST is already delivered in-house. However, extending this further would bring the CST's functions into the Government Office for Science or BIS, and have them performed by one of the Department's own teams. It is unlikely that a group of departmental officials could be formed with the requisite breadth of experience. Even if it were possible, such an internal group would not be seen by others across government as independent. It would also significantly reduce the spillover effect that CST's work currently has, for example through the networks of the CST members and the national academies. The review team therefore ruled this model out for the CST.

### **Status quo - continued delivery by a NDPB**

This option would see the CST continue on its existing basis. This is a model which has combined expertise, independence and credibility at little cost to the public purse. The review team considered at length the possibility of a change of status for the CST to an advisory group, which would be able to provide the same high quality, independent advice but with less bureaucracy and greater flexibility to adapt to changing requirements. The review team considered a model whereby the CST would be brought inside the Government Office for Science and supported as now through a Secretariat based in the Government Office for Science. However, advice from the Cabinet Office was that it would not be possible to reclassify the CST in this way without making changes to either the appointments or independence of members. This was not considered necessary or desirable. Consequently, the review team concluded that the CST should remain an arms' length NDPB.

## The ‘3 Tests’

One of the requirements of the Triennial Review process is an assessment against the government’s ‘3 Tests’ for delivery of functions by an NDPB.

### Is this a technical function?

The CST meets this test. It performs a technical function which needs external expertise to deliver. Its members are recruited in order to provide the right mix of scientific and technical expertise (including academia and business) in order for the CST to fulfil its Terms of Reference.

### Is political impartiality needed?

The CST meets this test. It provides a function which needs to be, and be seen to be, delivered with absolute political impartiality, that is where its value to government comes from.

### Is independent delivery to establish facts with integrity needed?

The CST meets this test. It is important that its function is delivered independently of Ministers to establish facts and/or figures with integrity. It has no interest to serve other than giving Ministers the best possible evidence-based advice.

**Stage 1 conclusion:** The review concluded that the function of the CST is still required, it meets all 3 of the tests for NDPB status, and it should remain an advisory NDPB.

**Recommendation 1:** The CST is providing a valuable and valued input and should continue to exist as an advisory NDPB.

# Stage 2

## Potential improvements to CST's function

In consulting stakeholders about the CST for Stage 1, the review team heard a number of consistent messages about how it could be improved for the future. The team also considered how far CST practice aligned with the principles of good corporate governance based on an assessment of the Stage 2 questionnaire completed by the CST Secretariat. The questionnaire, at Annex D, includes comment on whether the body complied with the requirements or provided an explanation, aligning, where appropriate for an advisory NDPB, with the principles in the Cabinet Office guidance. Evidence was submitted by the CST Secretariat to support its responses. It also had to rate itself in terms of compliance on a 4 point RAG rating (Red, Amber/Red, Amber/Green, Green).

**Stage 2 conclusion:** The CST operates in line with the principles of good corporate governance for an organisation of its size, but there are a number of opportunities to improve how the CST functions.

**Recommendations 2 to 7** below highlight a number of opportunities identified to improve how the CST functions.

### Purpose

Knowledge of the CST's terms of reference (TOR) was patchy, including among CST members. There was widespread consensus that some of the stated aims were not pursued, for example 'promote international co-operation in STEM'. Similarly most consulted highlighted that much of the CST's activities were caught up under the fourth bullet point in the TOR: "Making more effective use of research and scientific advice in the development and delivery of policy and public services across government". It was further suggested the TOR could be strengthened by reference to the government's growth and prosperity agenda and by making explicit CST's purpose as providing independent advice.

**Recommendation 2:** The terms of reference for the CST should be revised to refer explicitly to its provision of independent advice, and better aligned with the role it has been playing.

### Format and membership

There was widespread agreement that the format and frequency of CST meetings was about right. Members felt that the sub-group format worked particularly well and was an effective way of working. This enables a small group of members to do the preparatory work, draft a report/paper, and test the conclusions on the wider CST. This was where the personal and organisational contacts and networks that each member brought proved particularly valuable. This format also results in members' parent organisations providing additional support if necessary (the multiplier effect).

There was general agreement that the current size of the CST was appropriate and that it should not increase in size as there was a danger it would become too unwieldy. A balance of members from academia, business and the national academies was important and there was also currently a good mix across the scientific disciplines. The breadth and depth of knowledge and experience of the members is substantial and this gives weight to the CST's advice.

**Recommendation 3:** The CST should not increase further in size. However, the introduction of greater business representation has been well received and could be further enhanced.

There was consensus from CST members that the Secretariat is highly effective and that any change would have significant impact on the ability for CST to deliver its agenda. A high value was placed by CST members on the co-location of the Secretariat with the Government Chief Scientific Adviser.

### Engaging government departments

The Review found that the CST's relations with government departments is patchy, depending on the extent to which CST was undertaking projects related to a department, but also the extent to which the department had a science and technology objective. The network of departmental Chief Scientific Advisers was frequently cited by a range of different stakeholders as a useful mechanism at senior level that CST should foster closer relationships with to drive better engagement with departments. The review team has noted that work is in hand to achieve this and it should continue.

A number of stakeholders, recognising the value of the CST and its reports, indicated that they would welcome the opportunity to propose topics on which they would welcome the CST's input. It was, however, recognised that the CST might not consider that these topics were the priority or always have the expertise to contribute effectively on some of the proposals. Equally it was noted that government is not always aware of what emerging science and technology opportunities or challenges were, and that the CST was well placed to highlight these through its work.

**Recommendation 4:** The Government Office for Science should create a systematic approach to allow Ministers, Departmental Chief Scientific Advisers and senior policy officials to propose issues for the CST to consider. Whether the CST takes them forward would remain at its discretion as now.

The extent to which CST's reports were taken into account in departments, whether those with the policy lead or a strong interest, was raised as an issue by CST members and other stakeholders inside government. The review team's consultation suggested that this was highly variable, depending on the timing of the CST report and the extent to which relevant departments had been engaged as the CST's work progressed. As a result, many stakeholders suggested that the CST could play a bigger role in tracking the implementation of its advice, including follow up meetings with relevant departments.

**Recommendation 5:** The CST should routinely follow up with policy officials and Ministers if necessary on the implementation of their reports.

### Engaging other stakeholders

A number of stakeholders consulted by the review team highlighted that there were occasions when they could have provided information, expertise and/or support to CST on its projects. However, it was often unclear on what projects the CST was working, and therefore the opportunity to make this offer of support was often missed. The review team did find some indications that there was a multiplier effect when CST's work was more transparent. This triggered discussion, debate or research in a wider community, for example through the national academies.

**Recommendation 6:** The CST should increase the transparency of its work programme, where it can do so without jeopardising its ability to give rapid independent advice, to enable those who may wish to contribute to projects and/or disseminate the findings to do so more effectively. This would enable the CST to harness the willingness of other organisations to act as a multiplier for its work.

The reports produced by the CST are published on its website some time after they have been given to the Prime Minister. While making public its reports was of secondary consideration, the potential importance of doing this was recognised. Several stakeholders suggested that these could be more proactively brought to the attention of a wider audience than was currently the case, although they recognised that some methods of doing so would be resource intensive. During the review, the CST published its latest report on algorithms, which was highlighted effectively through Twitter.

**Recommendation 7:** The CST should consider how more attention could be brought to its reports, bearing in mind its current resourcing levels.

# Annex A: Consultees

## BIS stakeholders

1. Vince Cable, Secretary of State
2. David Willetts, Minister of State for Universities and Science
3. Martin Donnelly, Permanent Secretary
4. Special Advisers
5. Professor Sir John O'Reilly, DG Knowledge and Innovation
6. Claire Craig, Deputy Head, GO Science
7. Stuart Sarson, GO Science
8. Jeremy Clayton, Director Research Base
9. Peter Brooke, ex CST Secretariat
10. Professor John Perkins, Departmental Chief Scientific Adviser
11. Alan Pitt, CST Secretariat
12. Iain Gray, Technology Strategy Board

## Departmental Chief Scientific Advisers

13. Professor Dame Sally Davies, DoH
14. Professor David MacKay, DECC\*
15. Carole Willis, DfE\*\*
16. Professor Ian Boyd, Defra
17. Stephen Aldridge, DCLG\*
18. Professor Robin Grimes, FCO\*
19. Professor Vernon Gibson, MoD\*
20. Dr Bill Gunnyeon, DWP\*
21. Dr James Richardson, HMT\*

22. Professor Bernard Silverman, HO\*

23. Professor Roderick Smith, DfT\*

24. Professor Chris Whitty, DfID\*

## **External stakeholders**

25. Lord Krebs, Chair, House of Lords Science and Technology Committee\*

26. Andrew Miller, Chair, House of Commons Science and Technology Committee\*

27. Adrian Bailey, Chair, BIS Select Committee\*

28. Lord Young of Norwood Green, Shadow Spokesperson (BIS)\*

29. Royal Academy of Engineering

30. Royal Society\*\*

31. British Academy\*

32. Academy of Medical Sciences\*

33. Professor Sir Adrian Smith, VC University of London

34. Sir John Holman, Gatsby Foundation

## **Council for Science and Technology members**

35. Sir Mark Walport (co-Chair)

36. Professor Dame Nancy Rothwell (co-Chair)

37. Professor Sir Keith Burnett CBE

38. Professor Steven Cowley

39. Professor Dame Sandra Dawson

40. Mr Rowan Douglas

41. Dr Paul Golby CBE

42. Professor Dame Julia Goodfellow

43. Dr Hermann Hauser CBE

44. Professor Alan Hughes

- 45. Dr Michael Lynch OBE
- 46. Sir Paul Nurse
- 47. Sir John Parker\*
- 48. Sir Adam Roberts
- 49. Mr Colin Smith
- 50. Professor Sir Christopher Snowden
- 51. Dr Graham Spittle CBE\*
- 52. Professor Sir Michael Sterling
- 53. Professor Sir John Tooke

## **Ex-Council for Science and Technology members**

- 54. Professor Sir John Beddington
- 55. Dame Janet Finch
- 56. Professor Dame Sue Ion
- 57. Sir John Bell\*
- 58. Professor Geoffrey Boulton\*

## **Other government department stakeholders**

As customers of the CST, officials from HM Treasury, Cabinet Office, Department of Health and No10 provided comments to the review team. These were either on the substance of the review or procedural comments.

Officials from the Ministry of Justice, Department for Energy and Climate Change,

Department for Education, and the Administrations in Scotland and Northern Ireland were invited to provide comments but either declined or did not respond.

### **Key**

- \* Did not respond
- \*\* Declined to respond



# Annex B: Council for Science and Technology membership

*(as of 1 September 2014)*

## Co-Chairs

- Sir Mark Walport - Government Chief Scientific Advisor
- Professor Dame Nancy Rothwell - President and Vice-Chancellor, Manchester University

## Members

- Professor Philip Bond – visiting fellow at the Oxford Centre for Industrial and Applied Mathematics and visiting professor at the University of Bristol
- Professor Sir Keith Burnett CBE - Vice-Chancellor, Sheffield University
- Professor Steven Cowley – CEO, UKAEA
- Rowan Douglas – CEO, Willis Re Global Analytics and Chairman, Willis Research Network
- Anne Glover – Chief Executive, Amadeus Capital Partners Ltd
- Paul Golby CBE - Chair, EPSRC
- Professor Dame Julia Goodfellow - Vice-Chancellor, University of Kent
- Professor Sarah Harper – Professor of Gerontology, University of Oxford
- Michael Lynch OBE – founder of Invoke Capital
- Dervilla Mitchell – Director, ARUP
- Professor Fiona Murray – Professor of Entrepreneurship, MIT Sloan School of Management
- Sir Paul Nurse - President of the Royal Society
- Sir John Parker - President of the Royal Academy of Engineering
- Mr Colin Smith - Director of Engineering and Technology, Rolls-Royce

- Professor Sir Christopher Snowden - Vice-Chancellor and CEO, Surrey University
- Graham Spittle CBE, Vice-President, Competitive Project Office, IBM
- Lord Stern of Brentford – President of the British Academy
- Professor Sir John Tooke – President, Academy of Medical Sciences

# Annex C: International comparisons

Country	Committee title	Remit	Membership	Additional information
Australia	The Prime Minister's Science, Engineering and Innovation Council (PMSEIC)	The PMSEIC is the pre-eminent science advisory body to government. It is chaired by the Prime Minister. The PMSEIC provides advice to government on scientific and technological developments.	PMSEIC membership comprises Ministers, the Chief Scientist and a select group of experts.	<p>In 2012 the PMSEIC was reformed to make it more relevant and responsive to the immediate challenges and opportunities facing the nation. The reforms followed a review of PMSEIC's operations and membership.</p> <p>The PMSEIC now meets 3 times a year to provide more timely independent scientific policy advice to government on existing and emerging issues.</p>
Denmark	Danish Council for Research Policy	<p>The Council gives the Minister for Science, Technology and Innovation research policy advice.</p> <p>Responsibilities include advice on Danish and international research policy for the benefit of society, including advice on: framework conditions for research, funding for research and major national and international research infrastructures.</p>	The Council consists of a chairman and 8 members all of whom must be recognised researchers or knowledgeable about research. At least half of the members must be acknowledged scientists	The Danish Parliament and any minister can obtain research-related advice from the Council.
European Commission	Science and Technology Advisory Council	Main aim of the Council is to provide advice directly to the President of the Commission on how to create the proper environment for innovation by shaping a European society that embraces science, technology and engineering. Tackles issues with a cross-cutting character.	An independent and informal group of outstanding science and technology experts from academia business and civil society. As of June 2013, it is comprised of 15 members.	Created in February 2013.

Country	Committee title	Remit	Membership	Additional information
Finland	Research and Innovation Council of Finland	The Council is appointed for the duration of a government term, except for government ministers, whose term on the Council is limited to the duration of their ministerial term.	<p>The Council is chaired by the Prime Minister and also has the Minister of Education and Science, Minister of Economy, Minister of Finance and a maximum of 6 other Ministers appointed by government on it. In addition to Ministerial members there are also 10 other members appointed by government for the parliamentary term.</p> <p>Members must comprehensively represent expertise in research and innovation.</p> <p>The Minister for Education confirms remuneration.</p>	The Council has subcommittees on science and education and technology and innovation.
France	Haut Conseil De La Science Et De La Technologie (HCST)	To advise the government and legislature on all strategic matters relating to scientific research, technology transfer, and innovation.	<p>20 members (standard number is between 12 and 21), drawn primarily from academia. .</p> <p>HCST Counsellors have a 4 years mandate (renewable once).</p>	<p>Created in 2006 by Presidential decree</p> <p>Initially reported to French President, now to French Prime Minister</p> <p>The HCST meetings are organised on proposal of the French President of the Republic, the Prime Minister or the Chairman of the HCST.</p>
United States	The President's Council of Advisors on Science and Technology (PCAST)	PCAST is an advisory group of the US's leading scientists and engineers who directly advise the President and the Executive Office of the President. PCAST makes policy recommendations in the many areas where understanding of science, technology and innovation is key to strengthening the economy and forming policy that works for the American people.	Currently 20 members, re-chartered with each administration. Members are appointed by the President, and include scientists, engineers, and health professionals.	The Director of the Office of Science and Technology Policy who serves as the Council's Co-Chair.

# Annex D: Assessment against principles of good governance

Principles of corporate governance for advisory NDPBs	Assessment	Comments
<b>Accountability:</b> The Minister is ultimately accountable to Parliament and the public for the overall performance, and continued existence of the public body	Green	The Council for Science and Technology (CST) is an advisory body comprised of individuals appointed by the Prime Minister. Appointments are made in Accordance with the Code of Practice on Public Appointments and the CST is accountable to the Prime Minister.
The Minister and sponsoring department should exercise appropriate scrutiny and oversight of the public body. This includes oversight of any public monies spent by, or on behalf of, the body.	Comply	The Secretariat to the CST sits within the Government Office for Science. Oversight of expenditure takes place within the framework set by BIS as part of the Government Office for Science's budget.
Appointments to the board should be made in line with the statutory requirements and, where appropriate with the Code of Practice issues by the Commissioner of Public Appointments.	Comply	The Prime Minister appoints and reappoints members of the CST. Appointments and Reappointments are made in accordance with the <i>Office for Public Appointments' Code of Practice for Ministerial Appointments to Public Bodies</i> .  The Secretariat maintains records of the process followed for each appointment.  All members sign up to the Council's "Ways of Working" document which sets out, among other things, the role and responsibilities of members.
The Minister will normally appoint the Chair and all the board members of the public body and be able to remove individuals whose performance or conduct is unsatisfactory.	Comply	The Prime Minister appoints all Council members except those who hold their place <i>ex officio</i> (there are 5 <i>ex officio</i> members, including the Government Chief Scientific Adviser (GCSA) who is one of the Co-Chairs).  The Prime Minister can terminate the appointment by giving 3 months notice in writing, or immediately in the case of grave misconduct.
The Minister should meet the Chair on a regular basis.	Comply	The Prime Minister meets the whole CST at least annually, and may meet the Chairs more frequently. The CST meets with other Ministers routinely in developing its advice.
There should be a requirement to inform Parliament and the public of the work of the public body through the publication of an annual report (or equivalent publication).	Explain	CST produced annual reports until 2005/06. Since that date it has reported on its activities through ad hoc publications and also through the Government Office for Science's Annual Report.  See Recommendation 7
The public body must be compliant with Data Protection Legislation.	Comply	All data and information held by the CST's Secretariat is held in BIS's data and information system. The CST is compliant, therefore, with Data Protection legislation in the same way as BIS is.
The public body should be subject to the Public Records Acts 1958 1967.	Comply	As above, the CST is subject to the Public Records Acts, the same as the sponsor Department, BIS.

Principles of corporate governance for advisory NDPBs	Assessment	Comments
<b>Role of the Sponsoring Department:</b> The departmental board ensures that there are appropriate governance arrangements in place with the public body.  The sponsor teams within the department provides appropriate oversight and scrutiny of, and support and assistance to, the public body.	Amber/Green	The CST has a small Secretariat that acts as a sponsor team and ensures appropriate governance and necessary oversight arrangements are in place.  The CST does not report directly to the BIS (the sponsor department) Departmental Board on its activities as it is accountable to the Prime Minister and its activities span a number of departments across Whitehall.
The departmental board's regular agenda should include scrutiny of the performance of the public body.	Explain	The departmental board does not have a regular agenda item to cover scrutiny of its performance. The CST is a small body with a wide ranging function regarding the provision of advice on science and technology which spans a number of Departments and is tasked with reporting to the Prime Minister.
There should be a document in place which sets out clearly the terms of reference of the public body. It should be accessible and understood by the sponsoring departments and by all members. It should be regularly reviewed and updated.	Comply	The CST publishes its Terms of Reference on its website and at Annex A in its 'Ways of Working' document which is also published on its website.  It was last updated in 2012.
There should be a dedicated sponsor team within the parent department. The role of the sponsor team should be clearly defined.	Comply	The CST Secretariat is the sponsor team for the CST. It is based in the Government Office for Science in BIS. The role of the Secretariat is defined in the CST's Ways of Working document.
There should be regular and ongoing dialogue between the sponsoring department and the public body.	Comply	Communications between the CST and its Secretariat are regular and proportionate. The CST meets on a quarterly basis and the project sub-groups meet as required. Contact between the Co-Chairs is also regular.
There should be an annual evaluation of the performance of the board and its committees – and of the Chair and individual board members.	Explain	Previously there has been no formal process, but proposals for more systematic performance evaluation are under consideration. The CST is an advisory NDPB and most of its business is conducted at quarterly meetings (with ad hoc project groups set up as appropriate). As such, formal annual evaluation of individual members of the CST's performance would be disproportionate.

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<b>Role of the Chair:</b> The Chair is responsible for leadership of the board and for ensuring its overall effectiveness.	Green	There are currently 2 Co-Chairs on the CST. Appointments are made in accordance with official guidance and the Chairs have ensured that the CST fulfils its obligations efficiently and effectively.
The board should be led by a non-executive chair.	Comply	The CST has 2 Co-Chairs: the GCSA (ex officio) and an independent Co-Chair.
There should be a formal, rigorous and transparent process [for the appointment of the Chair]	Comply	The appointment for the independent Co-Chair is carried out under the auspices of the Commissioner for Public Appointments in accordance with the Commissioner's Code of Practice.
<p>The duties, role and responsibilities, terms of office and remuneration of the Chair should be set out clearly and defined in writing. Terms and conditions must be in line with Cabinet Office guidance and with any statutory requirements. The responsibilities of the Chair will normally include:</p> <ul style="list-style-type: none"> <li>representing the public body in discussions with the Ministers;</li> <li>advising the sponsoring Department and Ministers about board appointments and the performance of individual non-executive board members;</li> <li>ensuring that non-executive board members have a proper knowledge and understanding of their role and responsibilities. The Chair should ensure that new members undergo a proper induction process and is normally responsible for undertaking an annual assessment of non-executive board members' performance;</li> <li>ensuring that the board, in reaching decisions, takes proper account of guidance provided by the sponsoring department or Ministers;</li> <li>ensuring that the board carries out its business efficiently and effectively;</li> <li>representing the views of the board to the general public.</li> </ul>	Comply	<p>The terms of office and remuneration are outlined in the independent Co-Chair's letter of appointment.</p> <p>The roles and responsibilities of the Co-Chairs are outlined in the CST's Ways of Working document.</p> <p>The Chairs do:</p> <ul style="list-style-type: none"> <li>represent the CST in discussions with Ministers;</li> <li>discuss and agree appointment/reappointment requirements; and</li> <li>effectively and efficiently run CST meetings, ensuring CST reports have the support of all members.</li> </ul> <p>Induction for new members is handled via bilateral meetings between individuals and the Secretariat, and (where new appointments have been made) through discussions at the relevant CST quarterly meeting.</p>

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<b>Role of Board Members:</b> Board members should provide independent expert advice.	Green	There is a strong balance of members on the CST. They are fully aware of their individual and collective responsibilities in fulfilling the key function of the CST as a strategic advisory body.
There should be a formal rigorous and transparent process for the appointment of non-executive members of the board. This should be compliant with the Code of Practice issued by the Commissioner for Public Appointments.	Comply	Appointment of members of the CST is made under the auspices of the Commissioner for Public Appointments and in accordance with the Commissioner's Code of Practice. The process is undertaken by the sponsoring Department.
Board members should be properly independent of the Department and of any vested interests (unless serving in an ex-officio or representative capacity).	Comply	All CST members (excluding the GCSA as Co-Chair) are appointed as individuals independent of the government.  Members are required to declare any relevant interests upon appointment and this information is published in a register of interests on the CST's website. The register is updated as and when changes to membership occur, and where the Secretariat is informed of a change in circumstances by members.
Board members should be drawn from a wide range of diverse backgrounds. The board as a whole should have an appropriate balance of skills, experience, independence and knowledge.	Comply	As individuals leave, or come to the end of their term of office, consideration is given as to what experience/representation is required on the CST at that time, and subsequent recruitment made on the basis of this.  Advertisements for new members are drawn up to ensure that those with relevant experience and attributes are included but at the same time ensuring that no group are deterred from applying.
The duties, role and responsibilities, terms of office and remuneration of board members should be set out clearly and formally defined in writing. Terms and conditions must be in line with Cabinet Office guidance and with any statutory requirements.	Comply	Terms of office and remuneration are outlined in each member's letter of appointment. The roles and responsibilities of the Council are outlined in the Ways of Working document, published on the CST's website.
All board members must allocate sufficient time to the board to discharge their responsibilities effectively.	Comply	An estimate of time commitment is made in letters of appointment. A record of attendance and participation in quarterly and subgroup meetings is kept by the Secretariat.  Any concerns or issues over attendance would be discussed the individual and one of the Co-Chairs.



<b>Principles of corporate governance for advisory NDPBs</b>	<b>Assessment</b>	<b>Comments</b>
There should be a proper induction process for new board members. This should be led by the Chair. There should be regular reviews by the Chair of individual members' training and development needs.	Explain	<p>Individuals are appointed to the CST because of their knowledge/experience/expertise in a particular field.</p> <p>There is no formal induction process but new members are introduced to the CST in a session led by the Co-Chairs followed up with bilateral meetings with the CST Secretariat.</p> <p>Regular reviews of training and development needs are not undertaken but if any training or development needs are identified either by the individual or the Co-Chairs, the Secretariat would take action to address these.</p>
All board members should ensure that high standards of corporate governance are observed at all times. This should include ensuring that the public body operates in an open, accountable and responsive way.	Comply	CST is an advisory body, rather than a Board exercising corporate governance over an executive public body. Its standards of openness and accountability are set out in its Ways of Working document, which all members agree to.

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<b>Communications:</b> The public body should be open, transparent, accountable and responsive.	Amber/Green	CST's role is to provide advice to government on complicated and potentially controversial issues. Once advice is formulated it is then published and made available to the public. There could be more openness about CST's work programme at any stage.
The public body should operate in line with the statutory requirements and spirit of the Freedom of Information Act 2000.	Comply	CST's information is held in BIS's information management systems and the CST is subject to the Freedom of Information Act (Fol) in the same way as BIS.
The public body should make an explicit commitment to openness in all its activities. Where appropriate, it should establish clear and effective channels of communication with key stakeholders. It should engage and consult with the public on issues of real public interest or concern. This might include holding open meetings or annual public meetings. The results of reviews or inquiries should be published.	Comply	Engagement and consultation with stakeholders is used as appropriate when addressing specific projects.  The advice provided by CST to Ministers is published on its website.  It may however, in exceptional circumstances, provide advice to government in confidence where this is considered appropriate.
The public body should proactively publish agendas and minutes of board meetings.	Explain	Agendas of CST meetings are not published (as some items of discussion are confidential) but high level summaries of CST meetings are published online.  Stakeholders made it clear that they would like more clarity about CST's work programme at any time. See Recommendation 6.
There should be robust and effective systems in place to ensure that the public body is not, and is not perceived to be, engaging in political lobbying. There should also be restrictions on board members attending Party Conferences in a professional capacity.	Comply	The letter of appointment and Ways of Working document set out what is required of individual members in terms of political activity.  It is to be expected that some CST members may wish to attend party conferences in other capacities. They do not attend in their capacity as members of the CST.

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<b>Conduct and behaviour:</b> Board members should work to the highest personal and professional standards. They should promote the values of the public body and of good governance through their conduct and behaviour.	Amber/Green	CST members are aware of the standards required of them as set out the CST's Ways of Working Document.
A Code of Conduct must be in place setting out the standards of personal and professional behaviour expected of all board members. This should follow the cabinet Office Code. All members should be aware of the Code. The Code should form part of the terms and conditions of appointment.	Comply	The standards of personal and professional behaviour are made clear in the CST's Ways of Working document and the Code of Practice for Scientific Advisory Committees.
There are clear rules and procedures in place for managing conflicts of interest. There is a publicly available Register of Interests for board members. This is regularly updated.	Comply	<p>A Register of Interests is maintained by the CST Secretariat, and published on the CST website.</p> <p>Members are required to inform the Chairs in advance in the event of there being a conflict of interest on a matter and withdraw from the relevant discussion.</p> <p>Guidance on handling conflicts of interests is included in the Annexes of the CST's Ways of Working document.</p>
There must be clear rules in place governing the claiming of expenses. These should be published. Effective systems should be in place to ensure compliance with these rules.	Comply	CST has no separate finance rules: BIS policies for staff travel and subsistence rules are followed.
There are clear rules and guidelines in place on political activity for board members and that there are effective systems in place to ensure compliance with any restrictions.	Comply	Clear guidelines on political activity are laid out in the CST's Ways of Working document. Members are required to inform the chairs of any political appointment and understand that their membership of the Council may have to be terminated early if the positions are incompatible.
There are rules in place for board members and senior staff on the acceptance of appointments or employment after resignation or retirement. These are enforced effectively.	Explain	There are no specific rules in place. There is a duty of confidentiality on all members in relation to information they have received.

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